

REMARKS

Reconsideration of the application in light of the amendments and the following remarks is respectfully requested.

Status of the Claims

Claims 1, 10 and 11 are pending. Claims 2-9 were previously canceled without prejudice or disclaimer. Claim 1 has been amended. Claims 12-14 have been added to claim other features of the invention. No new matter has been added.

Rejection Under 35 U.S.C. § 102

Claims 1 and 10 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Kawakami et al. (EP 1089362).

Rejection Under 35 U.S.C. § 103

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami et al. (EP 1089362) as applied to claim 1, and further in view of U.S. Patent 4,615,960 to Yata. In addition claims 1, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroyuki (JP 09-063550) in view of Yata.

An important consideration of the present invention is that the structure of the storage device be sealed as much as possible from the atmosphere; yet provide access to the terminals. This is achieved by placing the body within sealing films, except for the location of holes. See for example Fig. 3 where the films 4, 5 enclose the body except for the hole between the parts A of the positive terminal 1b, which are thermally bonded to film 5. See paragraph [0116] of the published application. Even in a situation in which the holes extend completely though the body (Fig. 29) the holes do not connect to the interior of the body and can receive a conductive rod 12 that stacks them together.

Contrary to the arrangement of the present invention as defined by the amended claims, Kawakami has a break in the sealing film at the insulating portion, i.e., binder, 105, see Fig. 4. Further, the film 405 is laser welded to a plate 402 that is stuck in the binder 105. This seems susceptible to breakage. Also, there is no hole which forms the terminal.

The Examiner admits that Kawakami is silent as to the capacitance per unit weight of the electrodes as specified in the claims, but argues that since the reference discloses similar electrode structure and composition, it can be presumed that the claimed capacitance per unit weight is inherent. There are two problems with this position. First, the claim also has the limitation that “the weight of the positive active material is larger than that of the negative active material.” The Examiner does not even address this limitation, and Kawakami does not disclose it. Further capacitance can be manipulated by the amount of lithium and the use of a polyacene-based skeletal structure. Paragraphs [0056-0057] Thus mere disclosure of the compositions does not disclose that they should be selected so that “the capacitance per unit weight of the negative active material is over three times larger than that of the positive active material.” Thus, the claim limitation only occurs when the materials are selected as it requires.

In rejecting claim 11, the Examiner relies on Yata for its disclosure of polyacene-type skeletal structure having a hydrogen/carbon atomic ratio of from 0.05 to 0.60. It should be noted that Yata fails to make up for the deficiencies in the Kawakami patent as applied to claim 10, so the combination with Yata cannot render claim 11 obvious since it depends from claim 10.

All of the pending claims were rejected over the Hiriyuki patent in view of Yata. In effect, the Examiner substitutes Hiriyuki for Kawakami. However, Hiriyuki has no holes in the terminals facing outside. While it cannot be seen very well in the drawings, apparently Hiriyuki has conductive plates 8 with film 7 covering it and leads 10A, 10C in the inside and outside of it. Without a translation it cannot be determined how the covering abuts the leads and seals the structure, but it does not seem secure. Also, it does not appear that Hiriyuki discloses the lithium chemical compositions, so it is less relevant than Kawakami.

Claims 12-14 are presented to cover the situation where the internal exposed portion is either a penetrating hole (Fig. 29) or a non-penetrating hole (Fig. 4). According to claim 14, internal exposed portion is provided with a screw portion for fixing a lead wire. (1c & 2c, Fig. 23). These claims are patentable because they depend from claim 1.

CONCLUSION


In view of the above amendments and remarks, it is respectfully requested that the application and all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

The Commissioner is hereby authorized to charge any unpaid fees deemed required in connection with this submission, or to credit any overpayment, to Deposit Account No. 04-0100.

Dated: April 24, 2009

Respectfully submitted,

By 

Melvin C. Garner

Registration No.: 26,272

DARBY & DARBY P.C.

P.O. Box 770

Church Street Station

New York, New York 10008-0770

(212) 527-7700

(212) 527-7701 (Fax)

Attorneys/Agents For Applicant